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**SEMICONDUCTOR MANUFACTURING DEVICE AND METHOD OF MANUFACTURING SEMICONDUCTOR DEVICE**

**Pub. No.:** 2001-250819 [JP 2001250819 A ]

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**Application No.:** 2000-058951 [JP 200058951]

**Filed:** March 03, 2000 (20000303)

**International Class:** H01L-021/31; C23C-016/448; H01L-021/316

**ABSTRACT**

**PROBLEM TO BE SOLVED:** To provide a semiconductor manufacturing device equipped with a carburetor which does not become defective even left as it is under a high- temperature condition.

**SOLUTION:** This semiconductor manufacturing device performs such control under the control of a device controller that the device detects whether or not film forming treatment ends in step S2 and, when the device detects that the treatment ends, the device actuates a timer to count time from '0' in step S3. In step S5, the device checks whether or not the count time of the timer (the leaving time of the carburetor under a high-temperature condition) reaches a prescribed value and, when the count time reaches the value, the device shifts to step S6 and forces the carburetor to execute dummy vaporization.

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WPI Acc No: 2002-092590/200213

**Semiconductor device manufacturing apparatus performs  
vaporization of liquid material forcedly when vaporization is not  
performed for predetermined time**

Patent Assignee: MITSUBISHI ELECTRIC CORP (MITQ )

Number of Countries: 001 Number of Patents: 001

Patent Family:

| Patent No     | Kind | Date     | Applicat No  | Kind | Date     | Week     |
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Priority Applications (No Type Date): JP 200058951 A 20000303

Patent Details:

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| JP 2001250819 | A    | 10     | H01L-021/31 |              |

Abstract (Basic): JP 2001250819 A

NOVELTY - A vaporizer vaporizes a liquid material to form a film on a substrate. A controller controls the vaporizer to perform

vaporization forcedly, when the vaporization of liquid material is not performed for a predetermined time.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

- (a) Semiconductor device manufacturing method;
- (b) Semiconductor device

USE - For forming oxide film on substrate for semiconductor device manufacture.

ADVANTAGE - As the vaporization is performed forcedly after a predetermined time, the influence of liquid material on the substrate is reduced.

DESCRIPTION OF DRAWING(S) - The figure shows the flow chart explaining the process of controlling vaporizer. (Drawing includes non-English language text).

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Derwent Class: L03; U11

International Patent Class (Main): H01L-021/31

International Patent Class (Additional): C23C-016/448; H01L-021/316

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